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EXAMINER
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JOHN, CLARENCE

ART UNIT	PAPER NUMBER
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2443

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/550,928	<b>Applicant(s)</b> COMPTON, MATTHEW	
	<b>Examiner</b> CLARENCE JOHN	<b>Art Unit</b> 2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 15-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 13, 2010 has been entered.

### ***Status of Claims***

This action is responsive to an RCE filed on September 13, 2010. Claims 1, 3-13, 15-24 are pending.

### ***Response to Arguments***

1. Applicant's Arguments filed on 8/27/2010 have been fully considered but they are **moot** in view of the new ground of rejection by Zuqert et al. (US 6, 466, 832).
2. In response to the Applicant's arguments, the Examiner also states that Claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2D 1023, 1027 (Fed. Cir.

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1997); *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2D 1320, 1322 (Fed. Cir. 1989);  
*In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541,550 (CCPA 1969).

3. In addition, the law of anticipation does not require that a reference “teach” what an appellant's disclosure teaches. Assuming that reference is properly “prior art,” it is only necessary that the claims “read on” something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or “fully met” by it. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781,789 (Fed. Cir. 1983).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3-5, 11, 12, 15, 16, 18, 19, 22-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
5. The above cited claims recite, “... audio volume level ...”.

6. The Specification does not disclose audio volume level. "Audio level" is mentioned in Specification paragraphs [0067], [0068] and [0108]. However, audio level is not the same as audio "volume" level.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3 -13, 15 - 20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US6529506) in view of Kuhn et al. (US 6,414,960) in further view of Zuqert et al (US 6, 466, 832).
8. With respect to Claim 1, Yamamoto teaches a network interface device connectable to a network, the device being arranged to receive digital audio data representing an audio signal and to launch data packets representing the digital audio data onto the network, the device comprising: a packetiser operable: to format the digital audio data into audio data packets to be launched onto the network; (Column 2, lines 48-53. Here the digital audio data is formatted according to the digital audio data recorded as the audio data file ODau and the signature data embedded audio data file SDau); and to format the audio level data into audio level data packets separate from the audio data packets to be

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launched onto the network. (Column 22, lines 56-62. Here the attribute data is transmitted as a data file separated from the audio data).

9. Yamamoto teaches the limitations of Claim 1 as described above. However, Yamamoto does not explicitly state about an audio level detector having a processor programmed to generate from audio properties of the digital audio data, audio level data representing an audio level of the audio signal.
10. Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.
11. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

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12. Yamamoto and Kuhn teach the limitations of Claim 1 as described above.

However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

13. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

14. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

15. With respect to Claim 3, Yamamoto, Kuhn and Zuqert teach the limitations of Claim 1 as described above. However, Yamamoto and Zuqert do not explicitly state about a device according to claim 1, being arranged to launch the audio data packets and the audio level data packets onto the network as separate

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respective multicast groups. Conversely Kuhn does in fact teach such limitations. Kuhn teaches a multicast network consisting of gateways connecting New York, Los Angeles and Washington DC. (Figure 1, Column 5, lines 21-30. Here audio and video data are transmitted on to the network via a switched asynchronous transfer mode).

16. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto in order to transmit the best quality of audio and video to the subscriber via an ATM network so that the data can be converted back to analog or digital format.

17. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 3 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

18. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.



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19. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zugert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zugert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

20. With respect to Claim 4, Yamamoto, Kuhn and Zugert teach the limitations of Claim 1 as described above. However Yamamoto does not explicitly state in which audio level detector is arranged to generate the audio level data representing the audio level at periodic intervals. according to claim 1, in which the audio level detector is arranged to generate the audio level data representing the audio level at periodic intervals.

21. Conversely Kuhn does in fact teach such limitations. (Page 7, lines 17-40). Here the ambient audio program is determined by the test generator which monitors the audio channel for short periods of stable audio to measure power levels for every 15 frames over a period of 60 frames).

22. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined

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the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

23. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 4 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.
24. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.
25. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

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26. With respect to Claim 5, Yamamoto, Kuhn and Zuqert teach the limitations of Claim 1 as described above. However, Yamamoto does not explicitly state a device according to claim 1, in which: the digital audio data is associated with digital video data representing a video signal having a picture repetition period.

27. Conversely Kuhn does in fact teach such limitations. (Column 7, lines 41-45, Column 8, lines 14-19, lines 43-44, Figure 8, step 800, step 860. Here the condition on each frame boundary is tested to determine if the video markers were transmitted on the previous frame and the test generator waits for 3 seconds).

28. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

29. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 5 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

30. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies

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of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals.

The transmitter adds volume level indication to some of the packets.

31. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

32. With respect to Claim 6, Yamamoto, Kuhn and Zuqert teach the limitations of Claim 5 as described above. However, Yamamoto does not explicitly state about a device according to claim 5, in which the picture repetition period is a frame repetition period. Conversely Kuhn does in fact teach such limitations. (Column 7, lines 41-45, Column 8, lines 14-19, lines 43-44, Figure 8, step 800, step 860. Here the video markers are represented as frames which are transmitted as each frame boundary is tested to determine if the video markers were transmitted on the previous frame).

33. With respect to Claim 7, Yamamoto, Kuhn and Zuqert teach the limitations of Claim 5 as described above. However, Yamamoto does not explicitly state about

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a device according to claim 5, in which the picture repetition period is a field repetition period. Conversely Kuhn does in fact teach such limitations. (Column 7, lines 41-45, Column 8, lines 14-19, lines 43-44, Figure 8, step 800, step 860. Here the video markers are represented as frames which are transmitted as each frame boundary is tested to determine if the video markers were transmitted on the previous frame. According to the specification, the frame and field are similar).

34. With respect to Claim 8, Yamamoto, Kuhn and Zuerger teach a device according to claim 5, in which the digital video data is received by the device as part of an composite data stream carrying both the digital video data and the digital audio data. (Yamamoto's teachings on Figure 7, Column 32, lines 56-58, Column 33, lines 19-21. Column 34, lines 35-42. Here the Data Processing Apparatus 140 has both digital video data and digital audio data).

35. With respect to Claim 9, Yamamoto, Kuhn and Zuerger teach a device according to claim 8 further comprising a data converter for converting the digital audio data of the composite data stream into separate digital audio data to be launched onto the network as audio data packets, (Yamamoto's teachings on Column 26, lines 34-45, Figure 12, blocks Da1, Da2 ...Dan which are separate Digital audio Data packets); in which the packetiser is operable to format the digital video data into video data packets to be launched onto the network. (Yamamoto's teachings

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on Figure 8 – Column 33, lines 14-32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are separated into video data packets and transmitted).

36. With respect to Claim 10, Yamamoto, Kuhn and Zugert teach a device according to claim 8, in which the packetiser is operable to format the composite data stream into composite data packets to be launched onto the network. (Yamamoto's teachings on Column 36, lines 5-19).

37. With respect to Claim 11, Yamamoto teaches a network destination device connectable to a network, the device comprising: a processor connectable to a network, (Figure 1 and Figure 11, device 156 connected to a network via Dbus, Column 17, lines 29-30 -the control unit comprises a processor) the device being operable to receive audio data packets representing an audio level of the audio signal (Column 45, lines 50-57); and display (Column 32, lines 60-61, Figure 7, apparatus 140) a user interface (Column 17, lines 11-15) including a user indication representing a current value of the audio level data. (Column 2, lines 55-61, Column 3, lines 4-6).

38. Yamamoto teaches the limitations of Claim 1 as described above. However, Yamamoto does not explicitly state about the device being operable to receive audio level data packets carrying audio level data representing an audio level of the audio signal.

39. Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

40. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

41. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 11 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

42. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data

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includes audio data which indicates volume and strength of the audio signals.

The transmitter adds volume level indication to some of the packets.

43. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

44. With respect to Claim 12, Yamamoto, Kuhn and Zuqert teach a device according to claim 11, in which the user interface comprises means for generating a visible indication for display on a display screen, (Yamamoto's teachings on Column 32, lines 60-61, Figure 7, TV receiver 144b); indicative of a current value of the audio level data (Yamamoto's teachings on Figure 18a and 18b. This represents the value of the image displayed).

45. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 12 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

46. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which



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reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

47. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zugert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zugert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

48. With respect to Claim 13, Yamamoto, Kuhn and Zugert teach a device according to claim 12, comprising a display screen. (Yamamoto's teachings on Figure 7, TV receiver 144b)

49. With respect to Claim 15, Yamamoto, Kuhn and Zugert teach all limitations as described in Claim 11.

50. However Yamamoto does not explicitly state in which audio level data represents values of the audio level at periodic intervals.

51. Conversely Kuhn does in fact teach such limitations. (Page 7, lines 17-40). Here the ambient audio program is determined by the test generator which monitors

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the audio channel for short periods of stable audio to measure power levels for every 15 frames over a period of 60 frames).

52. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

53. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 15 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

54. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

55. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the

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teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

56. With respect to Claim 16, Yamamoto, Kuhn and Zuqert teach a device according to claim 11, the device being selectively operable to receive the audio level data packets but not to receive the audio data packets. (Yamamoto's teachings on Column 22, lines 48-62. Here the user receives the attribute data which is separated from the audio data).

57. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 16 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

58. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

59. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of

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ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

60. With respect to Claim 17, Yamamoto, Kuhn and Zuqert teach a device according to claim 1, the device being operable to launch the audio packets onto the network substantially in real time. (Yamamoto's teachings on Column 22, lines 52-58).

61. With respect to Claim 18, Yamamoto teaches a data network comprising: one or more devices according to claim 1; (Figure 1 and Figure 11, device 156 connected to a network via Dbus ); one or more network destination devices operable to receive audio data packets representing an audio signal (Column 45, lines 50-57); the one or more network destination devices comprising a user interface (Column 17, lines 11-15) ; arranged to provide a user indication representing a current value of the audio level data; (Column 2, lines 55-61, Column 3, lines 4-6) and a network providing data communication between the one or more network devices (Figure 1, Network N).

62. Yamamoto teaches the limitations of Claim 18 as described above. However, Yamamoto does not explicitly state about the one or more devices being operable to receive audio level data packets carrying audio level data

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representing an audio level of the audio signal; Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

63. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

64. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 18 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

65. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies

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of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals.

The transmitter adds volume level indication to some of the packets.

66. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuger also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuger with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

67. With respect to Claim 19, Yamamoto teaches a network interface device connectable to a network and operable to receive a composite data stream carrying digital video data and digital audio data; the digital audio data representing an audio signal, device comprising: a data converter for converting the digital audio data of the composite data stream into separate digital audio data; (Column 26, lines 34-45, Figure 12, blocks Da1, Da2 ...Dan which are separate Digital audio Data); a packetiser is operable: to format at least the digital video data of the composite data stream into video data packets to be launched onto the network; (Figure 8 – Column 33, lines 14-32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are separated into video data packets and transmitted); to format the separate digital audio data into audio

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data packets to be launched onto the network. (Column 2, lines 48-53, Column 22, lines 48-62), and to format the audio level data into audio level data packets, separate from the audio data packets, to be launched on to the network. (Column 22, lines 56-62. Here the audio level data is transmitted as a data file separated from the audio data).

68. Yamamoto teaches the limitations of Claim 19 as described above. However, Yamamoto does not explicitly state about an audio level detector having a processor programmed to generate from audio properties of the digital audio data, audio level data representing an audio level of the audio signal.

69. Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

70. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

71. Yamamoto, Kuhn and Zugert teach the limitations of Claim 19 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.
72. Conversely, Zugert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zugert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.
73. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zugert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zugert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.
74. With respect to Claim 20, Yamamoto, Kuhn and Zugert teach a device according to claim 19, in which the packetiser is operable to format the composite data stream into composite data packets to be launched onto the



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network. (Yamamoto's teachings on Figure 7, Column 32, lines 56-58, Column 33, lines 19-21. Column 34, lines 35-42. Here the Data Processing Apparatus 140 has both digital video data and digital audio data).

75. With respect to Claim 22 Yamamoto teaches a method of operation of a network interface device connectable to a network, (Figure 1 and Figure 11, device 156 connected to a network via Dbus); the device being arranged to receive digital audio data representing an audio signal (Column 45, lines 50-57); and substantially in real time to launch data packets representing the digital audio data onto the network, (Column 2, lines 48-53, Column 22, lines 48-62); the method comprising: formatting the digital audio data into audio data packets to be launched onto the network; (Column 2, lines 48-53, Column 22, lines 48-62); and formatting the audio level data into audio level data packets separate from the audio data packets to be launched onto the network. (Column 22, lines 56-62. Here the attribute data is transmitted as a data file separated from the audio data).

76. Yamamoto teaches the limitations of Claim 22 as described above. However, Yamamoto does not explicitly state about generating using a processor audio level data representing an audio level of the audio signal.

77. Conversely Kuhun does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video

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signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

78. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

79. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 22 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

80. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

81. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zugert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zugert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.
82. With respect to Claim 23, Yamamoto teaches a method of operation of a network destination device connectable to a network, (Figure 1 and Figure 11, device 156 connected to a network via Dbus); the device being operable to receive audio data packets representing an audio signal (Column 45, lines 50-57); the method comprising the step of: providing a user indication representing a current value of the attribute data . (Column 2, lines 55-61, Column 3, lines 4-6).
83. Yamamoto teaches the limitations of Claim 23 as described above. However, Yamamoto does not explicitly state about the device being operable to receive attribute data packets carrying attribute data representing an attribute of the audio signal.
84. Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are

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switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

85. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

86. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 23 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

87. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

88. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches

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transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zugert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

89. With respect to Claim 24, Yamamoto teaches a method of operation of network interface device connectable to a network and operable to receive a composite data stream carrying digital video data and digital audio data; the digital audio data representing an audio signal, the method comprising the steps of: converting the digital audio data of the composite data stream into separate digital audio data; (Column 26, lines 34-45, Figure 12, blocks Da1, Da2 ...Dan which are separate Digital audio Data); formatting at least the digital video data of the composite data stream into video data packets to be launched onto the network; (Figure 8 – Column 33, lines 14-32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are separated into video data packets and transmitted); and formatting the separate digital audio data into audio data packets to be launched onto the network. (Column 2, lines 48-53, Column 22, lines 48-62); formatting the audio level data into audio level data packets separate from the audio data packets to be launched onto the network. (Column 22, lines 56-62. Here the attribute data is transmitted as a data file separated from the audio data).

90. Yamamoto teaches the limitations of Claim 24 as described above. However, Yamamoto does not explicitly state about generating using a processor, audio level data representing an audio level of the audio signal. Conversely Kuhn does in fact teach such limitations. (Column 8, lines 61-67 and Column 9, lines 1-15, Figure 9). Kuhn teaches in his network about a method of an audio/video synchronous test signal generator where the audio and video signals are injected and routes the two signals into a switch where they are switched into a channel for encoding and transmission. The audio decoder terminates the audio input and synchronizes with the frame boundary of 900 and measuring the level of the audio channel 910. The audio content is transmitted if the audio level is greater than or equal to -45 dBu.

91. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Kuhn with Yamamoto so that an audio/video synchronous test signal generator be included in order to minimize or remove the noise signal.

92. Yamamoto, Kuhn and Zuqert teach the limitations of Claim 24 as described above. However, Yamamoto and Kuhn do not explicitly state about volume level present in the audio data.

93. Conversely, Zuqert teaches the above limitation. (Column 2, lines 25-26, Column 5, lines 34-37, Column 13, lines 15-19). Zuqert teaches a wireless transmission

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system for transmitting audio data. The system includes a transmitter which reframes the audio data into plurality of packets and transmits at least two copies of each packet separately during non overlapping periods. The ancillary data includes audio data which indicates volume and strength of the audio signals. The transmitter adds volume level indication to some of the packets.

94. Yamamoto and Kuhn teach in their networks which have common grounds of digital audio and video data processing and transmission. Zuqert also teaches transmitting audio data in his network. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Zuqert with Yamamoto and Kuhn by implementing a wireless transmission system for transmitting audio data in order to provide a high-fidelity system with improved sound quality.

95. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto, Kunh and Zuqert in further view of Fielder et al. US (6,446,037).

96. With respect to Claim 21, Yamamoto, Kunh and Zuqert teach a device according to claim 19, arranged to receive an audio stream; (Yamamoto's teachings on Column 2, lines 48-53); the packetiser being operable to format the separate digital audio data (Yamamoto's teachings on Column 2, lines 48-53, Column 22, lines 48-62); and the audio stream into audio data packets to be launched onto

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the network. (Yamamoto's teachings on Column 2, lines 48-53, Column 22, lines 48-62).

97. Yamamoto and Kunh teach the limitations as described in Claim 21. However, Yamamoto, Kunh and Zugert do not explicitly state the audio stream received follows AES standards.

98. Conversely, Fielder does in fact teach Data channels which have a sixteen bit wide core layer and two four bit wide augmentation layers conforming to standard AES which is published by the Audio Engineering Society, AES (Column 2, lines 57-60).

99. Yamamoto, Kunh, Zugert and Fielder teach about audio data processing and transmission. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Fielder with Yamamoto, Kunh and Zugert in order to maintain synchronization and effective buffering of incoming data where error detection is limited to save data capacity.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLARENCE JOHN whose telephone number is (571)270-5937. The examiner can normally be reached on Mon - Fri 8:00 am to 5 pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CJ/  
Patent Examiner  
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